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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/584,138	06/26/2006	Hans Peter Rath	292578US0PCT	5674

22850 7590 07/03/2007  
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.  
1940 DUKE STREET  
ALEXANDRIA, VA 22314

EXAMINER
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TESKIN, FRED M

ART UNIT	PAPER NUMBER
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1713

NOTIFICATION DATE	DELIVERY MODE
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07/03/2007

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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# Office Action Summary

Application No.

10/584,138

Applicant(s)

RATH ET AL.

Examiner

Fred M. Teskin

Art Unit

1713

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1,2,9 and 10 is/are allowed.
- 6) ☒ Claim(s) 3-8 and 11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 20061023.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date: \_\_\_\_.
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_.

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The preliminary amendment of June 26, 2006 having been entered, claims 1-11 are currently pending and under examination herein.

Claims 3-8 and 11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 3 (and claims dependent thereon) provides the limitation to "the solution of the polyisobutene ..." (see line 2). There is no proper and sufficient antecedent basis for this limitation in the claim or in any claim from which claim 3 currently depends.

Claim 7 (and claims dependent thereon) also provides the limitation to "the solution of the polyisobutene ..." (see lines 2-3). There is no proper and sufficient antecedent basis for this limitation in the claim or in any claim from which claim 7 currently depends.

Appropriate correction is required.

The prior art made of record and not relied upon is considered pertinent to applicants' disclosure.

Reusser is cited as pertinent to the utility of molecular sieves of effective pore size in the range of 7 to 11 Angstroms in removing chemically combined chlorine from hydrocarbons (note col. 1, lines 55+). Contacting a polyisobutene with such molecular sieves following removal and/or deactivation of a halogenated Lewis acid catalyst is neither taught nor suggested.

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Miyata et al is cited as pertinent to the utility of a hydrotalcite compound in removing a halogen component from a halogen-containing organic compound such as an olefin oligomer and ethylene/propylene/diene copolymer rubber (note working examples). Average pore diameter is not mentioned and zeolite treatment is not contemplated.

Rath and Ho *et al* are cited merely to show analogous art relating to isobutene oligomerization or polymerization in the presence of halogenated Lewis acid-based catalysts.

Claims 1-11, as presently understood, are free of the prior art. Examiner has not, as of the date of this Office action, located or identified any prior art documents that can be used to render the process defined by said claims anticipated or obvious to a person of ordinary skill in the art.

Claims 1, 2, 9 and 10 are allowable on the present record. Balance of the claims would be allowable if amended or rewritten to overcome the rejection under 35 U.S.C. 112 set forth in this Office action.


Any inquiry concerning this communication should be directed to Examiner F. M. Teskin whose telephone number is (571) 272-1116. The examiner can normally be reached on Monday through Thursday from 7:00 AM - 4:30 PM, and can also be reached on alternate Fridays.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu, can be reached on (571) 272-1114. The appropriate fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

FMTeskin/06-22-07

  
**FRED TESKIN**  
PRIMARY EXAMINER  
1713